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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,846	12/12/2000	Edward C. Guerrero JR.	5500-64600	7034

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EXAMINER

NGUYEN, DANNY

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 01/29/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/736,846

Applicant(s)

GUERRERO ET AL.

Examiner

Danny Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 21 and 22 rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et. al. (U.S. Patent No. 5,834,958) .

Regarding to claim 21, Taylor et. al. disclose that a clamping circuit comprises a voltage divider (R4, R5) connected to the voltage rail (VCC) and a shunt regulator (U2), wherein the voltage divider applies an input voltage to the shunt regulator, wherein the voltage divider is configured so that the input voltage is greater than or equal to a reference voltage of the shunt regulator when the voltage on a voltage rail is greater or equal to a first voltage level (see col. 4, lines 4-7), and wherein the voltage divider is configured so that the input voltage is less than the reference voltage level when the voltage rail is less than the first voltage level; the shunt regulator connected to the voltage divider , wherein the shunt regulator turns on when the input voltage is greater than or equal to the reference voltage level and turns off when the input voltage is less the reference voltage level; and a transistor (Q2) coupled to the voltage rail (VCC) and to the shunt regulator (U2), wherein the transistor turns on in response to the shunt regulator turning on, wherein the transistor sinks current from the voltage rail when the

transistor is on to decrease the voltage rail below the first voltage and the transistor turns on and off the shunt regulator (see fig. 1).

Regarding to claim 22, Taylor et. al. disclose that the clamping circuit comprises a current limiting resistor (R3) connected between the shunt regulator (U2) and the transistor (Q2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-12, 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et. al. (U.S. Patent No. 5,834,958) in view of Budelman (USPN 5,629,608).

Regarding to claims 1, and 12, Taylor et al. disclose a clamp circuit which comprises a detect stage (R4, R5) and clamping stage (U2), wherein the detecting stage activates the clamping stage when the supply voltage exceeds a first voltage level (a reference voltage of the shunt regulator U2), and the clamping voltage is connected to the detecting stage and reduces the supply voltage in response by the detecting stage. Taylor et al. do not disclose that a method of operating a computer system comprises a system memory; a voltage regulator provides a supply voltage to a plurality of components, wherein one of the components is a switching regulator; the switching regulator regulates the supply voltage and provides a termination voltage to the system

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memory. Budelman discloses a computer system comprises a system memory (330); a voltage regulator (voltage regulator 360, see fig. 3) provides a supply voltage to a plurality of components, wherein one of the components is a switching regulator (switching regulator 420, see fig. 4); the switching regulator regulates the supply voltage and provides a termination voltage (Bus 310) to the system memory. It would have been obvious to one having skill in the art at the time the invention was made to modify the circuit of Taylor et al. with a system memory, a voltage regulator, and switching regulator as taught by Budelman in order to regulate the power supply^{to} the components_N in the computer system.

Regarding to claims 3 and 15, Taylor et. al. disclose that the detecting stage is a voltage divider (R4, R5) connected to the supply voltage (VCC).

Regarding to claims 4, 5, 16, 17, Taylor et. al. disclose that the clamping stage (U2) reduces the supply voltage (VCC) by shunting current to ground and the clamping stage is a shunt regulator (U2).

Regarding to claims 6, and 18, Taylor et. al. disclose that the clamping stage comprises a transistor (Q2).

Regarding to claims 7, and 20, Taylor et. al. disclose that the first voltage level is lower than a maximum voltage level (see col. 4, lines 60-63).

Regarding to claims 8-11, 14, and 19, Taylor et. al. disclose that the clamping stage (U2) prevents the supply voltage from exceeding the maximum level that causes erroneous behavior and reduce the voltage level when the detecting stage (R4, R5) stops detecting that the supply voltage exceeds the first voltage level.

3. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et. al. and Budelman, and further in view of Lee et. al. (U.S. Patent No. 5,920,511), Taylor et. al. and Budelman disclose the memory, but the combination of Taylor and Budelman do not disclose the memory is DDR-SDRAM. Lee et. al. disclose the various types of memory can be used to store data (including memory DDR-SDRAM) (see col. 1, lines 10-16). It would have been obvious to one ordinary skill in the art to substitute the memory of Taylor et al. and Budelman with DDR-SDRAM memory in order to access data faster.

Response to Amendment

4. Applicant's arguments filed 11-13-2002 have been fully considered but they are not persuasive.

Regarding to claim 21, it is argued that Taylor et al. fail to disclose a transistor coupled to the voltage rail and to shunt regulator, wherein the transistor is configured to turn on in response to the shunt regulator turning on. However, Taylor et al. teach a transistor (Q2) coupled to the voltage rail (Vcc) and to shunt regulator (U2), wherein the transistor is configured to turn on in response to the shunt regulator turning on (the shunt regulator is in conduct, placing the transistor (Q2) in conduct, see col. 4, lines 35-38). Thus, Applicant's claim 21 does not distinguish over Taylor et al. reference.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (703)-305-5988. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703)-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-305-1341 for regular communications and (703)-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

DN

D.N.

January 27, 2003



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